

BENJAMIN SCHLESINGER, PH.D.

RESUME, LIST OF EXPERT APPEARANCES AT TRIAL, PUBLICATIONS, PAPERS AND PRESENTATIONS

SUMMARY

Dr. Schlesinger, founding president of Benjamin Schlesinger and Associates (BSA), is one of North America's leading independent energy consultants, specializing in gas and electricity marketing, pricing, infrastructure, trading practices, strategic planning, and power plant development worldwide. He has nearly four decades of experience in managing and carrying out engineering/economic analyses of complex energy issues, with particular focus on North American energy commodity movements and pricing, policies and programs. Working jointly with Gas Strategies under Dr. Schlesinger's direction, BSA provided North American (US, Mexico, Canada) market risk analyses for LNG due diligence studies on behalf of lenders to the Tangguh LNG, Peru LNG, Sakhalin LNG, Rasgas II/III LNG, Egypt II LNG and Atlantic LNG Train 4 projects. Beyond this, he has advised over 400 clients in the U.S., Canada, and fifteen other countries, including the top utility, energy trading and producing, manufacturing, regulatory, educational, private power, and financial services companies. A former vice-president of the American Gas Association, Dr. Schlesinger has testified before the U.S. Congress and in 16 states and provinces on the direction of the gas industry, gas contracting, purchase and sales prices, royalty valuations, market value, hedging and risk management, and related industry practices.

EDUCATION

- Stanford University, Stanford, California, M.S. (1969) and Ph.D. (1975), Industrial Engineering, now Department of Management Science and Engineering.
- Dartmouth College, Hanover, New Hampshire, A.B. (1967) and B. Engineering (1968).

EXPERIENCE

1/09-Present PRESIDENT, Benjamin Schlesinger and Associates, LLC. (BSA), Bethesda, Maryland.

- On January 1, 2009, BSA became a part of the Galway Group, L.P. of Houston, Texas. The Galway Group is a team of experienced energy advisors that delivers insightful industry knowledge and practical commercial and operational assistance related to project development and implementation; financing and capital structuring; and market research and analysis to public and private energy interests around the world.

3/84-12/08 PRESIDENT, Benjamin Schlesinger and Associates, Inc. (BSA), Bethesda, Maryland.

- Dr. Schlesinger's consulting experience extends to LNG and pipeline natural gas, liquids, and electricity pricing, supply, contracting, commercial mechanisms, market forecasting and regulatory issues. Major assignments:

- Conducted for major lenders due diligence assessments and North American gas market forecasting related to importation of liquefied natural gas (LNG) through Atlantic, Gulf Coast and Pacific regasification terminals.
 - Directed BSA's major LNG analysis for the American Gas Foundation, *The Ability of the U.S. to Compete in the Global LNG Marketplace: An Assessment of Challenges and Opportunities*, prepared with Poten & Partners and Altos Management Partners.
 - Analyzed pipeline economics, finance, and market mechanisms for the New York Mercantile Exchange (NYMEX), where he served as a member of the Natural Gas Advisory Committee from 1985-2000
 - Conducted cutting-edge analysis of pipeline financing issues in short-term contract markets, jointly with the Canadian Energy Research Institute (CERI).
 - Assessed historic, prevailing, and projected market values of natural gas and gas liquids in the context of royalty litigation, contract disputes, regulatory proceedings, and utility and industrial gas purchase negotiations throughout North America.
 - Directed energy contract and Sales & Purchase Agreement (SPA) negotiations for gas and electric utilities, power generators, industries and municipal agencies in North America, Europe and Asia.
 - Created and prepared widely-cited multi-client studies of emerging gas and power industry commercial practices, focusing on spot and futures trading risk management, pipeline capacity markets, gas and power marketing and market values, and energy trading.
 - At the UN Economic Commission for Europe, co-founded in 1994 (along with the Russian Federation representative) the center for promotion and development of market-based gas industries in economies in transition, known today as the UN ECE Gas Centre.
 - Developed and/or audited fuel purchasing plans and strategies for more than 100 large-scale independent power projects throughout the Americas, in areas including supply, transportation, distribution, pricing and power competition.
 - Instructed since 1990 on energy markets and contracting in the unique "Alphatania" courses hosted by EconoMatters of London. Attendees include leadership of major European and Asian energy firms.
- Dr. Schlesinger has testified as an expert on major gas industry business issues, including the foregoing, for private clients and the gas industry in general before the FERC, the U.S. Congress, Department of Energy, and utility regulators and panels in Alaska, Arizona, California, Connecticut, D.C., Florida, Illinois, Louisiana, Maryland, Massachusetts, Mississippi, New Mexico, Ohio, Ontario, Texas and West Virginia.

- Lead consultant in the firm's natural gas industry practice, including direction of gas supply, marketing, and business strategy assignments for gas utilities, pipeline companies, and other private and public clients. Major accomplishments:
 - Together with the Energy Futures Group, Inc. created and conducted a pioneering analysis of natural gas spot markets, trading, and brokerage risks and opportunities for a group of 20 gas pipelines, producers, and utilities.
 - Directed an analysis of worldwide North Slope gas markets and transportation alternatives for the State of Alaska; testified before legislative committee.
 - Prepared energy market competition and supply studies as part of business strategy assignments for three utilities.
- Contributed substantively to Gas Industry Challenges for the 1980's, Booz, Allen's monograph on innovative analysis methods for the utility and pipeline industries in a changing business environment.

2/77-7/82 VICE PRESIDENT, Policy Evaluation and Analysis, American Gas Association (AGA), Arlington, Virginia.

- Responsible for selection, quality and completeness of all AGA energy analyses and special quantitative reports from 1978 to 1982.
- Directed an analysis staff of 26 that produced more than 80 major studies used to underpin all of AGA's government relations, international, marketing and consumer communications (1982 group budget to \$1.5 million). Delivered testimony on behalf of the gas pipeline and utility industry in numerous Congressional, Department of Energy, and EPA hearings and proceedings on U.S. energy policy, planning methods, synthetic fuels, and coal and environmental policy formulation.
- As senior staff, Dr. Schlesinger was responsible for AGA's board-level Gas Supply, Demand and Reserves Committees, worked closely with gas pipeline and energy utility executives in formulating policy and preparing forecasts of gas supply, demand and price.
- Promoted to Vice President of AGA in 1978 after 16 months as Director, Policy and Economic Analysis.
- Key technical accomplishments: Led macroeconomic analysis of major potential oil supply disruption; created gas-use strategy to reduce air emissions from coal boilers; analyzed coal gasification trade-offs, including air, health and safety.

2/76-2/77 CHIEF ENVIRONMENTAL ENGINEER, Office of Commercialization, Energy Research and Development Administration (ERDA), Washington, D.C.

- Contributed to direction and leadership of a policy and technical nature on all major environmental, health and safety issues related to commercializing coal gasification and liquefaction, oil shale, and biomass energy technologies.
- Worked directly with the Deputy Administrator toward defining ERDA's position on the Clean Air Act Amendments of 1977. Maintained liaison between his office and the EPA, Interior, NIOSH, and the Water Resources Council.

10/74-2/76 Ph.D. and post-doctoral studies at Stanford University, sponsored by the U.S. Geological Survey.

- Completed and refined Ph.D. dissertation on Western coal development at Stanford University, funded by the U.S. Geological Survey, Resource and Land Investigations Program.
- Nominated for IEEE Franklin Taylor Award, 1975.

3/70-6/75 PROJECT ENGINEER, Environmental Services Department, Bechtel Corp., San Francisco, California.

- Supervised economic and environmental analyses, and site assessments for major energy and transportation construction projects ranging in capital cost from \$5 million to \$4 billion. Managed environmental impact assessments for:
 - 600-mile crude oil pipeline through Quebec and New York state
 - Siting of a full-scale U.S. uranium enrichment plant
 - Proposed 30-mile metrorail in San Juan, Puerto Rico.
- Participated in five nuclear power plant environmental reviews. Developed toxic waste database for the Santa Ana Watershed Planning Agency. Analyzed crop pattern strategy and prepared an industrial development plan for the Setif Region, northern Algeria.

PROFESSIONAL AND CIVIC ACTIVITIES

- Dr. Schlesinger is President for the 2008-2009 fiscal year of the National Capital Area Chapter, U.S. Association for Energy Economics (NCAC-USAEE). The NCAC comprises 200 energy analysts, managers, and related specialists in the greater Washington, D.C. region, and is affiliated with the USAEE and International Association for Energy Economics (IAEE).
- As an Adjunct Professor, Dr. Schlesinger teaches a Spring Semester graduate course in Energy Economics at the School of Public Policy, University of Maryland. He has also lectured on the natural gas industry before courses at Johns Hopkins SAIS, Stanford University, Columbia University, CUNY, University of Pennsylvania, Syracuse University, and more than 200 executive seminars in the U.S., Canada, Mexico, Europe and the United Kingdom, Japan, Russia and the Philippines. He has appeared on Bloomberg News, CNN Business Line, CNN International, and other media, and his opinions and analysis of natural gas industry and related economic developments have been quoted in The New York Times, The Wall Street Journal, The Washington Post, Business Week, and other publications.

- Dr. Schlesinger has served as a member of Advisory Boards to the New York Mercantile Exchange, U.S. Office of Technology Assessment, Gas Research Institute, Solar Energy Research Institute, and the Regional Institute for Children and Adolescents in Rockville, Maryland. Dr. Schlesinger currently serves on the Bethesda Transportation Solutions Advisory Committee. For the Capital District Kiwanis, he is a past Lt. Governor and Membership Chair.